IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Express Mail No.: EV 570 176 507 US

Date of Deposit: 2 May 2005

Application No.:

10/511,718

International

Filing Date:

16 April 2003

Applicant:

LIU, Jun, et al.

Title:

TUBERCULOSIS VACCINES INCLUDING RECOMBINANT BCG STRAINS EXPRESSING ALANINE DEHYDROGENASE,

SERINE DEHYDRATASE AND/OR GLUTAMINE

SYNTHETASE

Attorney Docket:

9896-000053/NP

RECEIVED

3 JAN 2006

Mail Stop PCT Commissioner for Patents P. O. Box 1450 Alexandria, Virginia 22313-1450

Legal Staff International Division

EXPRESS MAIL TRANSMITTAL

The following papers are being deposited with the United States Postal Service Express Mail Post Office To Addressee on 2 May 2004 and addressed for receipt by the United States Patent and Trademark Office:

- 1. Express Mail Transmittal (Label No. EV 570 176 507 US);
- 2. PCT Transmittal Letter to the US Designated/Elected Office Concerning a Filing Under 35 USC 371 (2 pages, in duplicate);
- 3. Signed Declaration and Power of Attorney (3 pages);
- Computer Readable Form (CFR) of Sequence Listing on 3.5" diskette;
- 5. Statement for Sequence Listing (1 page);
- 6. Copy of Notification of Missing Requirements (2 pages);
- 7. Return Postcard.

HARNESS, DICKEY & PIERCE, P.L.C. P.O. Box 828 Bloomfield Hills, Michigan 48303 (248) 641-1600

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PTC-1390 (Rev. 02-2005)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

ATTORNEY'S DOCKET NUMBER
9896-000053/NP
U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

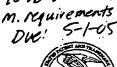
10/511,718 INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED PCT/CA03/00566 16 April 2002 (16.04.2002) 16 April 2003 (16.04.2003) TITLE OF INVENTION Tuberculosis Vaccines Including Recombinant BCG Strains Expressing Alanine Dehydrogenase, Serine Dehydratase and/or Glutamine Synthetase APPLICANT(S) FOR DO/EO/US LIU, Jun; CHEN, Jeffrey and ALEXANDER, David Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items 3 (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). \mathbf{X} An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). An English language translation of the annexes of the International Preliminary Examination Report under PCT 10. Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: 11. I An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 12. 13 L A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. A substitute specification. 16. L A power of attorney and/or change of address letter. 17. X A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825. 18. I A second copy of the published International Application under 35 U.S.C. 154(d)(4). A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). Express Mail Transmittal (Label EV 570 176 507 US); Statement Regarding Sequence Listing; copy of 20. X Other items or information: Notification of Missing Requirements; Return Postcard

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Page 1 of 2

PTO-1390 (Rev. 02-2005)
Approved for use through 3/31/2007. OMB 0651-0021
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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| U.S. APPLICATION NO. (if known, see 37 CFR 1.5) | | INTERNATIONAL APPLICATION NO. | | ATTORNEY'S DOCKET NUMBER | | | |
|--|--------------------------------------|--|--|--------------------------|--------------------------|---|--|
| 10/511,718 | | | PCT/CA03/00566 | | 9896-000053/NP | | |
| The following fees have been submitted | | | | CALCULATIONS \$ | PTO USE ONLY | | |
| 21. Basic national fee \$300 22. Examination fee If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4) | | | | | \$ | | |
| 23. Search fee Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority | | | | | \$ | | |
| TOTAL OF 21, 22 and 23 = | | | | | \$ 0.0 | 00 | |
| Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. | | | | | | | |
| Total Sheets E | xtra Sheets | | additional 50 or fraction o to a whole number) | RATE | | | |
| - 100 = | /50 = | | | x \$250 | \$ 0.0 | 00 | |
| Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(h)). | | | | | \$ 130.0 | 00 | |
| CLAIMS | NUMB | ER FILED | NUMBER EXTRA | RATE | \$ | | |
| Total claims | | - 20 = | | x \$50 | \$ | | |
| Independent claims | | - 3 = | | x \$200 | \$ | | |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$360 | | | | \$ | | | |
| TOTAL OF ABOVE CALCULATIONS = | | | | | \$ 130.0 | | |
| Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2. | | | | | 0.0 | T | |
| SUBTOTAL = | | | | | \$ 130.0 | 00 | |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). | | | | | \$ 0.00 | | |
| TOTAL NATIONAL FEE = | | | | | \$ | 130.00 | |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + | | | | | \$ 0.00 | | |
| | | | TOTAL | EES ENCLOSED = | \$ | 130.00 | |
| 2005 SNAJARRO 00000062 080750 10511718 | | | | Amount to be refunded: | \$ | | |
| 1617 130.00 DA | | | | | Amount to be charged: | \$ | |
| a. A check in the amount of \$ to cover the above fees is enclosed. | | | | | | | |
| | | it Account No. $\underline{08}$ | 3-0750 in the amount of | \$ <u>130.00</u> to co | over the above fees. | | |
| c. X The Commi Account No | ssioner is here . <u>08-</u> 0750 | eby authorized to ci A duplicate copy | narge any additional fees words of this sheet is enclosed. | hich may be required, | or credit any overpaym | ent to Deposit | |
| | | | RNING: Information on this rd information and authorize | | olic. Credit card inform | ation should not | |
| | | | FR 1.495 has not been me n to pending status. | et, a petition to revive | e (37 CFR 1.137(a) or (t | o)) must be filed | |
| SEND ALL CORRESPONDENCE TO: | | | | | Make | \mathscr{A} | |
| Joseph M. LAFATA | | | | | · // / | <u>′ </u> | |
| HARNESS, DICKEY & PIERCE, P.L.C. | | | | | AFACA | | |
| NAME | | | | | AL AYA | | |
| | Bloomfield Hills, MI 48303 | | | | | | |
| | | | | | ON NUMBER May | y 2, 2005 | |





United States Patent and Trademark Office

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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO. Dox 1450 Alexandria, Vinginia 22313-1450

U.S. APPLICATION NUMBER NO.

FIRST NAMED APPLICANT

ATTY. DOCKET NO.

10/511,718

Jun Liu

9896-000053/NP

INTERNATIONAL APPLICATION NO.

PCT/CA03/00566

LA. FILING DATE

PRIORITY DATE

04/16/2003

04/16/2002

CONFIRMATION NO. 4920 371 FORMALITIES LETTER

OC000000015244900

27572 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 **BLOOMFIELD HILLS, MI 48303**

Date Mailed: 03/01/2005

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 10/18/2004
- Copy of the International Search Report filed on 10/18/2004
- Preliminary Amendments filed on 10/18/2004
- Biochemical Sequence Listing filed on 10/18/2004
- U.S. Basic National Fees filed on 10/18/2004
- Priority Documents filed on 10/18/2004

The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- \$130 Surcharge for providing the oath or declaration later than 30 months from the priority date (37 CFR 1.492(e)) is required.

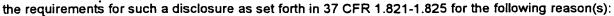
SUMMARY OF FEES DUE:

Total additional fees required for this application is \$130 for a Large Entity:

\$130 Late oath or declaration Surcharge.

The following items MUST be furnished within the period set forth below:

• The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with



- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e) and PCT Rule 13ter.1(a)(ii).
- APPLICANT MUST PROVIDE:
 - An initial or substitute computer readable form (CRF) of the "Sequence Listing."
 - A statement that the contents of the paper or compact disc and the computer readable form are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.825(d).
- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
 - For Rules Interpretation, call (703) 308-4216
 - To Purchase Patentin Software, call (703) 306-2600
 - For Patentin Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

KAREN R MCLEAN

Telephone: (703) 308-9140 EXT 214

PART 1 - ATTORNEY/APPLICANT COPY

| U.S. APPLICATION NUMBER NO. | INTERNATIONAL APPLICATION NO. | ATTY, DOCKET NO. |
|-----------------------------|-------------------------------|------------------|
| 10/511,718 | PCT/CA03/00566 | 9896-000053/NP |

FORM PCT/DO/EO/905 (371' Formalities Notice)